

SYNOPSIS

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1. TITLE:

Role of Amino Acids in Chronic Kidney Disease (CKD) Patients: Implications for Health and Treatment Outcomes

2. INTRODUCTION:

Chronic Kidney Disease (CKD) is a progressive condition characterized by the gradual loss of kidney function over time. The role of amino acids in the management of CKD is of significant interest due to their potential impact on nutritional status, inflammation, and overall patient outcomes. This study aims to explore the importance of amino acids in CKD patients, focusing on how amino acid supplementation might influence disease progression, nutritional deficiencies, and treatment efficacy. Understanding these relationships is crucial for developing effective dietary and therapeutic strategies to improve the quality of life for CKD patients.

3. RESEARCH QUESTION:

How does amino acid supplementation affect the nutritional status, inflammation levels, and disease progression in CKD patients?

4. OBJECTIVES:

- To assess the nutritional status of CKD patients receiving amino acid supplementation.
- To evaluate the impact of amino acid supplementation on inflammation markers in CKD patients.
- To determine the effect of amino acid supplementation on the progression of CKD.

5. HYPOTHESIS:

Amino acid supplementation in CKD patients will improve nutritional status, reduce inflammation, and slow the progression of the disease.

6. MATERIAL AND METHODS:

- ****STUDY DESIGN:**** Randomized controlled trial.
- ****SETTING:**** Nephrology clinics in a tertiary care hospital.
- ****STUDY POPULATION:**** CKD patients aged 18-75 years.
- **DATA COLLECTION PROCEDURE:** Data will be collected at baseline, 6 months, and 12 months. Nutritional status will be assessed using dietary records and blood tests. Inflammatory markers and kidney function will be monitored using standard laboratory techniques.

8. ETHICAL CONSIDERATIONS:

Informed consent will be obtained from all participants. The study will ensure the privacy and confidentiality of patient data. Ethical approval will be sought from the Institutional Review Board (IRB).

9. IMPLICATIONS OF RESEARCH:

The findings from this study will provide insights into the potential benefits of amino acid supplementation in CKD patients, guiding clinical practices and dietary recommendations. Improved nutritional status and reduced inflammation could lead to better management of CKD, potentially slowing disease progression and enhancing patient quality of life.

10. REFERENCES:

References will be written in the Vancouver style, utilizing reference management software like Mendeley. Key references will include recent studies and reviews on amino acid supplementation and CKD.